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Keys to successful capital buying

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Helping you manage the business of buying

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(Cover photo by Bill Schropp)

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Inventories are near bottom

The long 1982 inventory correction may be pretty much over.

That's not to say that every industrial purchasing executive queried in a new, ***PurchasingWorld*** survey thinks he has hit rock bottom. But by and large the feeling is that the big imbalances of earlier this year are fast disappearing—and that any business pickup next year may even require some new accumulation.

As one Midwestern buyer puts it, "Sure, we hope to make some further downward adjustments. But they'll be small and spotty. The big across-the-board reductions of the past 6-12 months are all behind us."

But perhaps the following survey results best describe the past, present, and future trends:

■ **Recent performance:** Despite the fact that sales and production have continued to edge lower, about two out of every three respondents report success in reducing overall days' supply over the past six months.

■ **Current evaluation:** True, an almost-as-large percentage feels further reductions are still possible. But most of these respondents hasten to add that any additional paring will be quite modest.

■ **Product-by-product evaluation:** Buyers list about 24 product lines where stocks are still on the heavy side—with steel and casting leading the pack. But these same PMs note about a dozen areas where inventories are now a bit too low. The latter figure is in sharp contrast to six months ago when a similar survey found only one or two items on the "too low" list.

■ **Nearterm trends:** Another indication of a bottoming out is indicated by the fact that nearly two out of every five buyers feel that improving business could necessitate some tonnage increases over the next six months. This is a significantly bigger number than those anticipating further reductions.

■ **Hedging against price hikes:** Some 35% of the respondents are still pursuing this tack when substantial savings are possible. Some of the areas where such forward buying is noted: pressure gauges, cast iron fittings, motors, and electrical controls.

■ **Hedging against strikes:** Not one respondent at present is laying in anything extra in anticipation of a future work stoppage—primarily because everything is so readily available. On the other hand, a few do express concern that some hedging may be necessary next year—particularly in steel.

■ **Leadtimes:** About 25% of queried PMs admit to some concern next year—with these products singled out for possible stretchouts: specialty items, wire and cable, castings, forgings, some paper goods, timber, and some types of stainless steel.

This "keep 'em lean" strategy, they say, is based on a number of factors, including (1) the relatively low operating rates anticipated in almost all sectors next year, (2) continued high carrying costs, (3) topside pressure to improve bottom-line performance, and (4) improved purchasing techniques.

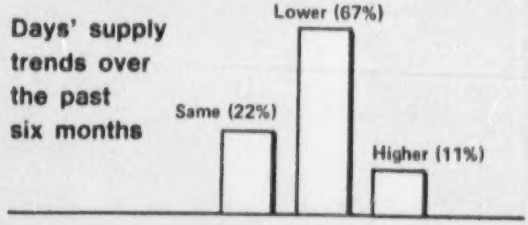
On the last item, some of the strategies currently being used include (1) increasing reliance on blanket orders, (2) ordering small lots more frequently, (3) improved computer control of inventories, (4) closer liason with vendors, (5) more use of consignment shipments, (6) refusing to accept early or bigger-than-ordered deliveries, (7) reducing the firm's overall purchase mix, (8) more frequent inventory reviews, and (9) improved nearterm forecasting.

As one PM succinctly sums it up: "Of course, we will never completely eliminate inventory miscalculations. But what we can do is keep them to tolerable proportions—and hopefully limit any negative impact on company, industry, and, ultimately, overall economy performance." ***PW***

Inventories: A new PM appraisal

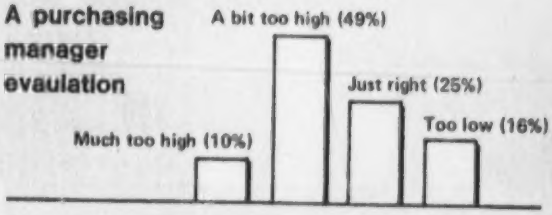
The recent past

Days' supply trends over the past six months



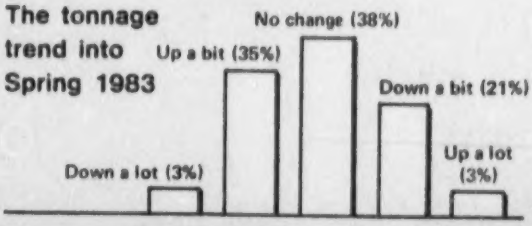
Current status

A purchasing manager evaluation



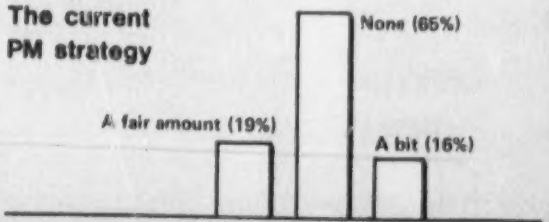
The nearterm outlook

The tonnage trend into Spring 1983



Price hedging

The current PM strategy



PW Predicts...

By Robert S. Reichard, prices, economics editor

Look for higher gas prices

Brace for rapidly rising natural gas prices—not only over the next few quarters, but over the longer pull, too.

A new projection by Philip R. Watters, a Houston-based consultant tells the sad story. At a recent Energy Bureau conference, here's what he predicted would develop over the next few years:

■ *Demand*: Total U.S. consumption will decline modestly over the next decade—falling from 19.8 trillion cubic feet in 1981 to 18.9 trillion cubic feet by 1990. Industrial sector gas demand, however, will remain relatively unchanged.

■ *Supply*: The higher prices allowed by provisions of the Natural Gas Policy Act (NGPA) will continue to have a positive impact on the development of indigenous U.S. natural gas supplies. Nevertheless, U.S. gas drilling activity and gas reserve additions will not be sufficient to prevent further declines. By 1990, total U.S. output from both conventional and unconventional (tight sands, shale gas, etc.) will fall to 15.8 trillion cubic feet compared to 19.1 trillion in 1981.

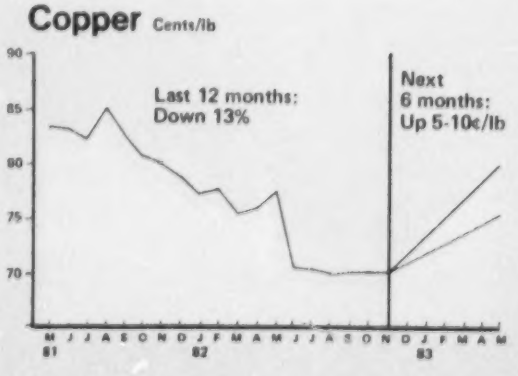
■ *Prices*: Average U.S. wellhead prices will largely be dictated by the provisions of the NGPA through 1984. As the volume of new gas supplies receiving relatively high ceilings increases, composite U.S. wellhead prices will move up as follows: A 14.8% increase in 1984 (up to $2.71/million BTU)—and a further 13.7% increase in 1984 (to $3.08/million BTU).

Aluminum

No meaningful recovery seems likely before early next year, as orders continue to disappoint and operating rates sink below the 60% mark. Tight-fisted user buying strategy isn't helping either. And it all continues to impact on prices—with new reductions hitting

The copper price scene

CURRENT SITUATION: The red ink continues to flow. True, prices seem to have bottomed out—but at levels far under those needed to even approach the breakeven point. And some producers are offering 60-day payment terms. Factors behind the weakness: (1) still sagging construction and automotive markets, (2) the failure of Third World countries to trim production—something which has more than offset big U.S. production cutbacks, and (3) new (albeit modest) increases in LME and Comex stocks. **All in all, a Free World 1982 surplus of over 100,000 tons now seems inevitable.**



DEMAND: Year-to-date "apparent consumption" is off by more than 20%. And while some closing of the gap is likely over the last few months of the year, it's hard to see how a sizeable decline can be avoided. One area bucking the trend: copper roofing, where demand is actually up. In any case, **a fair-sized bounceback is anticipated for next year—but to nowhere near the peaks of a few years ago.** As for the longer pull, the industry is only talking in terms of a 3% annual growth rate.

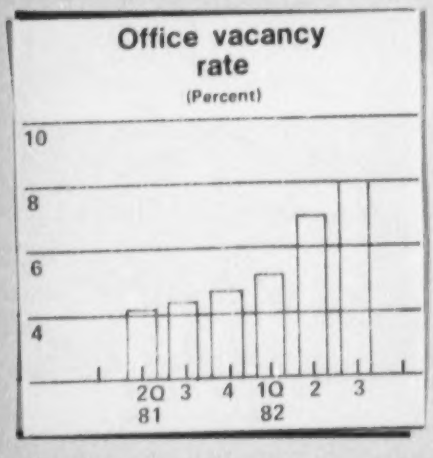
SUPPLY: Capacity is no problem—with the domestic operating rate now under 50%. On a more disturbing note, however, there's a growing consensus that many of the shuttered mines will never reopen—because they just can't compete with foreign facilities, better ore bodies, and fewer pollution curbs. Indeed, it's part of a longterm trend—**with the domestic share of Free World output already down to near** 15%—less than half the 35% figure of 1950.

PRICE OUTLOOK: Quotes will eventually have to rise—if only because of intensifying cost pressures. Domestic mines, for example, already need anywhere from 90c-$1.50/lb to break even. And while some overseas outfits can still turn out metal for under 60c/lb—there are a growing number that now require 80c and even 90c/lb. But any recovery to that level will be slow—given today's market fundamentals. **Indeed, it may not be until next spring before prices begin to approach even the relatively low 80¢/lb barrier.**

sheet and plate products and ingot sinking into the mid-40s range. Any bounceback to the mid-60s range (regarded as the breakeven point) will have to wait until next summer—with full-scale recovery to the official 76¢/lb list delayed until sometime in 1984.

Office space

Press for better deals as vacancy rates soar. Some tenants are now offered several months of free rent, free remodeling, and even compensation for moving expenses. The reason for all



this: More than 8% of existing space is now unrented—nearly double the 4.4% figure of a year ago. Also some 200 million square feet of new space (20% of current supply) will be hitting the market over the next year and a half. That's nearly three times the existing increase in projected demand over the same period.

Sulphur

The recent $12.50/ton price rollback by Frasch producers was not unexpected, given poor end product demand, depressed world prices, and rising inventories. On the latter score, Frasch producer stocks have jumped by more than 40% over the past year—climbing to near 4 million metric tons. Count on current low prices spilling over into the new year—with any attempt to recoup the new decline at least another 6 months away.

Fertilizers

Foreign competition continues to erode ammonia prices—so much so that in the past few years more than half of all North American producers have been forced to shut down—as prices drop as much as $75/ton under production costs. More important, there are few signs of any reversal. In fact, prices have just slipped again—with Mexican material now going for under $115/ton. And the story is much the same in potash—another key fertilizer where North American quotes now average out at only $70/ton—some $7/ton under a year earlier.

Steel

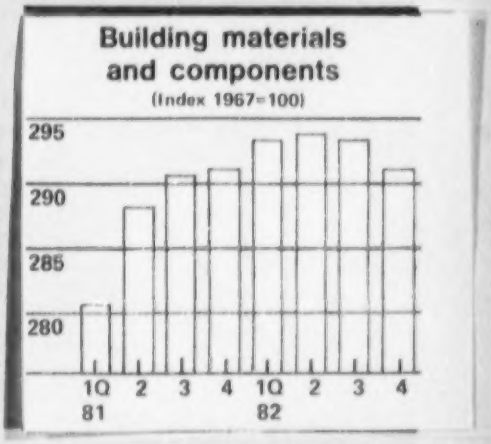
Markets remain dead. Fourth quarter shipments are likely to hit only 16-17 million tons. And for the year as a whole, a 65-million-ton total is all that can be expected. All this suggests continuing easy prices—a trend which is being intensified by current bargain-basement imports from such diverse countries as Brazil, Romania, Spain, Korea, and the Common Market. To be sure, some firming is likely next year as demand slowly improves, imports curbs are imposed, and a big 7-million-ton inventory reduction is completed. But shipments in 1983 will only rise to near 75 million tons—hardly a boom year. As such, it may be late 1983 before all the current discounting dries up.

Semiconductors

Prices may have bottomed out—except for some of the newer devices where competition remains as keen as ever. But any sustained advance is still nowhere in sight. In any event, an early 1982 demand pickup has fizzled out—with the ratio of orders booked to orders filled falling steadily in recent months. Indeed, some industry spokesmen have just about written off 1982—with (1) dollar sales put at or under 1981 levels and (2) the industry operating under the 75% level. More important, no significant pickup is now seen until next spring. After that, both prices and demand should start firming—enough to boost overall 1983 dollar sales by some 15-20%.

Building materials

The big construction slump continues to take its toll. Recent declines are reported in such key areas as rock products, softwood lumber and plyform, cement, structural steel, and paving asphalt. In any event, the all-material price average has been edging lower



ever since June. And with the slow winter season approaching, tags could well drop another percent or so. As for next year, any recovery should be quite slow unless current projections calling for only 1.3 million housing starts are drastically revised upwards—say to the 1.7-1.8 million level the industry regards as normal.

Lead

It's still an all-out buyers' market. But because of costs (most secondary producers are now awash in a sea of red ink), prices are not likely to move

Predicts...

much lower. On the other hand, there's little chance of quotes breaking through the 30¢/lb barrier anytime soon—not with today's sluggish demand from battery makers, a continuing phaseout of lead in gasoline, and endemic oversupply. On the latter score, the current U.S. 1.22 million metric tons of secondary capacity could be enough to last for more than a decade—even if one factors in a steady 1-2% annual growth rate.

Machine tools

Plenty of bargains here, too, with discounts ranging as high as 25%. Contributing to the easiness is the big overhang of Japanese numerically controlled machines where even bigger reductions are reported. Overseas sellers also offer good financing terms. Nor is any nearterm turnaround in tools expected—not with orders running more than 50% under a year ago and backlogs dwindling fast. Indeed, it may not be until mid-1983 before this key sector of the economy starts firming up again.

Magnesium

Discounting has spread to what has for years been a controlled and relatively firm market. Some ingot, for example, has been going for $1.305/lb—some 3½¢/lb under the official producer list. Rising imports (some 2000 metric tons are expected by yearend) are adding to the overall downward pressure. Another sign of the times: Operating rates of major producers are down sharply—varing anywhere from under 50% to 67% of rated potential—with no real pickup anticipated until the second half of 1983.

Zinc

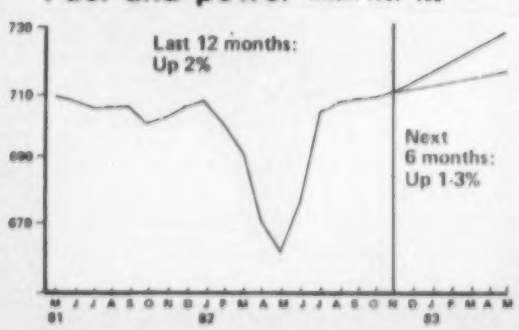
Prices remain quite firm—primarily because of such supply-side factors as production cutbacks, the impact of extended summer shutdowns, and deferred new expansions. On the other hand, demand (hit hard by recent auto cutbacks), continues to disappoint. But with supplies relatively tight, another 2¢/lb boost over the next month or two can't be ruled out. This kind of increase could also be justified on the basis of costs; for the industry figures that only about half of the Free World producers can turn a profit at 40¢/lb. ***PW***

The energy price scene

CURRENT SITUATION: More good news here—as the late spring price advance (engendered by a crude oil increase) runs out of steam. But even with the recent hike, price averages are only running about 2% ahead of a year ago—a far cry from all the double-digit increases of a few years back. Supplies, too, remain more than ample as demand continues to run well under earlier estimates.

DEMAND: Superimpose a projected lackluster fourth quarter on year-to-date figures, and about a 1-2% decline in overall 1982 energy use seems inevitable. Biggest decline will be in oil (off 4%) with other power and fuel sources shaping up as follows: electricity, natural gas, and hydro (no change), coal (up ½-1%), and nuclear (up 4-5%). But next year could see a turnaround. Indeed, a new government report suggests that first half 1983 energy use will run 3% ahead of a year earlier. **But a 1-2% gain looks a lot more realistic—given the slow business recovery now anticipated.**

Fuel and power Index: 1967=100



SUPPLY: No problems. Indeed, in some areas, such as natural gas, **suppliers are actually offering deals to prevent further inroads by fuel oil.** And in coal, the demand lull, coupled with rising inventories, has been forcing mine closures—to the point where 1982 output will run only 2.7% ahead of 1981. As for oil, OPEC is still finding it hard to curtail output—while closer to home, **U.S. refineries are now operating at under 75% of their potential.**

PRICE OUTLOOK: Only natural gas presents nearterm headaches as gradual deregulation makes for more double-digit advances. Contrast that to oil, where a continuing glut suggests little meaningful change in average refined products over the next 3-6 months—though seasonal factors could force heating oil to climb and gasoline to edge lower. As for coal, contract prices will rise, but at a relatively slow rate, because escalation factors in longterm contracts are decelerating. **As for electricity—moderation in fuel costs indicates that spring 1983 rates will average only 3-5% above year earlier levels.**

Freight industry changes will give buyers more options

There's good news and bad news on the freight front.

First the good news. A continuation of overcapacity, new service innovations, technological progress, and deregulation will continue to offer opportunities for heads-up purchasers of transportation services.

But by the same token, don't expect miracles as far as freight rates are concerned—and certainly no repeat of the current year, with all its discounting and surprisingly small boosts in official tariffs. Reason: Cost pressures—despite a concerted effort to contain them—will continue to mount.

These are the key findings of a new Data Resources, Inc., (DRI) transportation analysis. Zeroing in on the cost front, for example, the big econometric consulting firm sees outlays for labor, fuel, equipment, etc. moving up at a substantial 7-9% annual rate over the next few years.

Go beyond that point (and into the 1985-95 period)—and the annual cost advances could accelerate into the 8-10% annual range (see table).

On the other hand, these higher costs (and, hence, higher rates) will be softened to some extent by major structural changes within the industry—changes which could offer new opportunities for keeping overall freight bills within bounds. In any event, here are just a few of the key developments to look for in this area:

■ **Continuing trucker-railroad competition:** One big, new variable here will be the introduction of new 48-foot rigs. Other things being equal, they could have the effect of reducing truck costs by 12-20%. This, in turn, will probably force the railroads to buy new rail cars as well as new trailers that can handle these big rigs in piggyback operations.

■ **Barge-railroad cooperation.** Competition should compel barge carriers to work more closely with the railroads in order to reduce empty backhauls. Although bitter enemies in the past, increased cooperation is already appearing as both modes strive to improve productivity and equipment.

■ **Improved air cargo service:** A rethinking of the entire approach may be necessary—as shippers mandate more reliable door-to-door small package deliveries. This, in turn, suggests that major airlines will become more directly involved in cargo activities, tending to eliminate the shipping agent or broker functions performed currently by companies outside the industry.

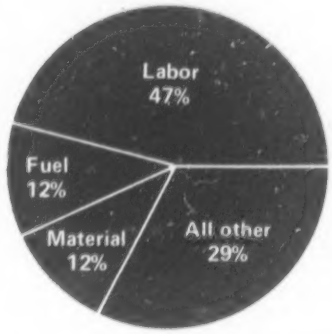
■ **A more efficient trucker setup:** Substantial changes are in the works—if not over the next few years then certainly after 1985. Among other things, the distinctions between less-than-truckload (LTL) and truckload (TL) will become blurred as activities of individual carriers become more shipper and less function oriented.

Then, too, exempt motor carriers should continue to be an increasingly important force—replacing the more expensive Teamster driver. Also, private fleets will play a decreasing role during the next decade or so as regulated carrier service offerings become competitive with company-owned truck operations.

Finally, you can expect increasing use of rail trailer-on-flatcar (TOFC) service on the part of large, general freight carriers to enhance their competitiveness in longhaul corridors. Savings now average over 20¢ per vehicle mile for TOFC compared to a Teamster-operated over-the-highway tractor on movements greater than 300 miles. By 1995, a substantial share of longhaul TOFC traffic could be contracted placements by major motor carriers.

How freight costs build up

Railroads



Trucks

All these trends—plus such other changes as (1) big new expenditures on intermodal technology, (2) carrier mergers, (3) changes in work rules, and (4) proliferation of user fees—will obviously have a major impact on cost trends. Here's how DRI sees these pressures developing on a mode-by-mode basis over the next 15 years:

Railroads

Wage settlements that are substantially higher than on competing modes will play a significant role—especially since railroads are so labor intensive.

At last report, some 47% of all rail outlays were attributable to labor (see chart on cost breakdowns). Also pushing costs up will be new investments in rights of ways, yards, and terminals. All in all, these suggest a nearly 8% annual rate rise in aggregate rail costs over the 1982-85 period.

On a brighter note, increased efficiency (traceable to deregulation and merger activity)—coupled with cost-saving changes in work rules—will act collectively as a partial counterforce. Technological innovations—including lighter cars and steering trucks, should also help keep railcar operating costs in the single-digit range.

As for specific cost pressures, labor will lead the upward trek, rising at a 9% nearterm annual rate. But fuel increases will be relatively small. After 1985, these cost pressures will tend to equalize—as fuels show substantial acceleration and pay boosts moderate a bit.

The Cost Pressures on Your Transportation Suppliers

	Railroads	Trucks	Air	Barge
	(Cost indexes—1980 = 100)			
1980	100	100	100	100
1981	113	112	116	114
1982	121	120	119	117
1983	129	128	127	125
1984	140	139	139	138
1985	152	151	154	153
	(Compound annual rates of increase)			
1982-85	7.9	8.0	9.0	9.3
1985-95	8.1	8.5	9.7	9.8

Source: Data Resources, Inc.

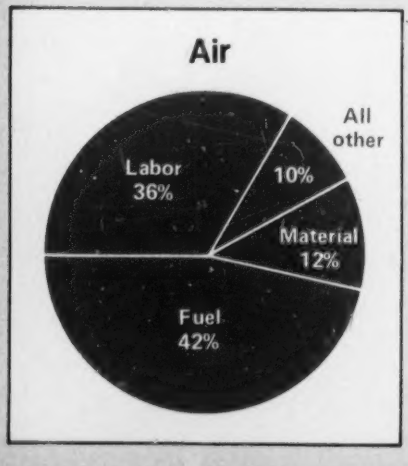
Trucking

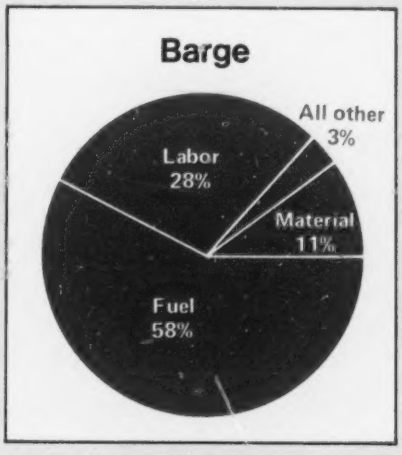
Severe pressure on the Teamsters Union to avoid further layoffs has prompted a much more moderate agreement with the carriers—one that is expected to increase wages only 8% annually in the 1982-1985 period. Moreover, as some motor carriers continue to withhold scheduled cost-of-living increases and as the shift to nonunion drivers and helpers continues, the actual wage component of truck costs could fall a bit under this 8% estimate.

Overall, however, motor carrier costs are projected to increase at a rate of 8.1% annually in the 1982-85 period.

After 1985, a rationalized motor carrier sector (with operations more closely related to market conditions) faces increases in costs due to higher user taxes for trucks using the interstate highway system. As the federal government moves to a "user pays" policy, highway and bridge maintenance/construction costs will be shifted back to the primary users.

But again there could be some offsets. Specifically, the major carriers will continue to institute strong cost-control programs across all business lines. Increased use of leased equipment and terminals, owner/operator drivers, concessions from the Teamsters, improved vehicle lifespan, and innovative operations cost-control packages are some of the techniques that will be employed.





Airlines

Several trends should help keep costs within bounds. These include (1) carrier assumption of a larger role in overall cargo service, (2) a surplus of used jets (including many fuel-efficient ones) which should provide a pool of capacity for expanded air cargo operations, (3) increasing demand as users strive for fast delivery to hold down inventory costs, and (4) relatively modest fuel hikes.

All told, these should keep the average annual rate of rise in overall air carrier costs near 9% through 1985—and just under 10% for the subsequent 10-year period.

Waterborne freight

The big unanswered question here is the extent of user fees. Current thinking suggests that the Department of Transportation will attempt to gradually increase the fuel tax over the next five years.

Such an increase would result in an additional 2-3% increase in the annual growth rate of fuel, an increase which the depressed barge industry probably could absorb. On the other hand, if pro-user fee legislators can institute a full-recovery taxing mechanism, inland waterways costs will immediately jump by 10-15%.

Disregarding a possible user fee adjustment, inland waterway transportation costs are projected to increase at a 9.3% annual compound growth rate from 1982 to 1985—and at a 9.8% rate in the 1985-1995 period. These figures, incidentally, are well above the small 2.6% increase anticipated for the current year and the less-than-7% advance seen for 1983.

One encouraging note to close on: DRI cost forecasts for all freight modes over the very near term (next year) are well under the projections they forecasted earlier this year (*PurchasingWorld*, March 1982, p. 58). As of now, DRI sees an average 1983 overall freight cost advance of just under 7%—a significant improvement over the previous 10-12% projection. ***PW***

Little seasonal impact on leadtimes

Not even seasonal forces are having much impact on leadtimes these days—with any tendency for a normal fall stretchout being offset by the continuing deep recession.

To be sure, there are isolated instances of longer waits (see city-by-city rundown). But in most cases they are due to temporary supplier shutdowns rather than to any inherent shortage of capacity.

Indeed, capacity utilization actually continues to shrink—as slowly growing factory potential is superimposed on a flat production curve. At latest report, for example, the overall U.S. rate had dropped below the 70% mark, matching the lows of the 1974-75 downturn.

Further confirmation of a continuing buyers' market and relatively problem-free procurement comes from such key indicators as:

- ***PW's*** exclusive leadtime index: This barometer of overall trends is currently being clocked in at "49"—suggesting that, on average, more leads are coming in than are stretching out.
- Vendor delivery performance: The 12% who report a speed up is a smaller number than the 16% figure of last month. But it still outnumbers those reporting a slowdown by a better than 2:1 margin.
- Forward commitments: The 13% who are commiting 90 days or more in advance is the lowest figure in nearly a decade. ***PW***

Leadtimes and availability

Chicago: Several grades of lumber have come in—with these new leads (in weeks): softwood framing (1) and softwood plywood and plyform (2). Coal is also in (to ½-1). Aluminum remains unchanged with waits varying from 6-8 weeks (except for extrusions—4 weeks). Cold rolled and galvanized steel continue at 4-5 weeks.

Cleveland: Cold-finished aluminum has gone out a bit (to 6-8 weeks). Other typical leads (in weeks): alloying materials (on demand), glassines and greaseproof papers (4-5), hardwood and softwood lumber (3), plastic sheet film (3), strapping (2-3), 2-ply fiber drums (2), and coil coating paint (2-3).

Houston: Shop-fabricated carbon steel pipe has stretched a bit (to 4-8 mo.). Ditto, shop-fabricated alloy pipe (to 6-10 mos.). Reason: Supplier shutdowns. Most other items remain relatively unchanged. Examples (in weeks): electronic parts (4-6), tungsten carbide parts (14-16), packaging (2-4), welding supplies (4-6).

Los Angeles: Out somewhat (in weeks) are paints (3-4), adhesives (1-2), and carbon black (2). But these are more than offset by shrinkages in copper tubing (3-4), heavy duty steel (9-10), heavy aluminum sheet (13-17), aluminum pipe (13-17), electric equipment (17), syn rubber (1½-2), and silbrazed fittings (13).

Philadelphia: Out a few extra weeks are these steel items: stainless bar (to 10-12), mill carbon bar (to 5-7), and mill stainless round coil (10-12). Blame the above on mill shutdowns rather than any capacity restraint. On a more positive note, coming in are large scale ICs (to 12), and ceramic capacitors (to 4-6).

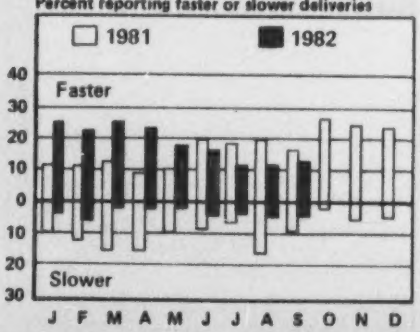
Pittsburgh: No major changes to report here—with these typical leads (in weeks): maintenance paint (5), polyethylene and PVC (4), alloying metals (2-3), waterproof paper (6-8), lumber and plywood (2-4), steel strapping (2-3), kraft paper bags (4-6), corrugated boxes (3-4), and standard steel drums (2-3).

PW monthly procurement status report

Source: NAPM

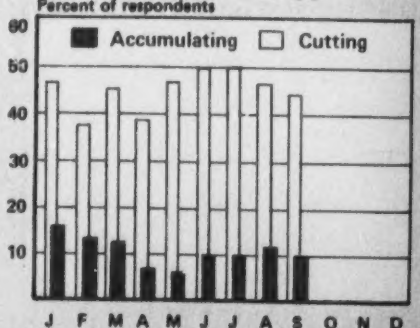
Delivery performance

Percent reporting faster or slower deliveries



Inventory strategy

Percent of respondents



Leadtimes (in weeks)

Steel

	Now	Month ago	Six months ago
Sheet (Phil)	5	5	5
C-R Sheet (Chgo)	4½	4½	4½
Plate (Phil)	4½	4½	4½
Plate (Chgo)	2	2	2
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	5	5	6½
H-R Bars (Chgo)	2	2	2
Cold-Drawn Bars (Phil)	6	12	12
Galvanized (LA)	3½	3½	7
Galvanized (Chgo)	4½	4½	4½
Structurals (Chgo)	2	2	2
Structurals (Hous)	17	17	17
Tubing (Phil)	19	19	19
Grey Iron Castings (LA)	7	7	3½
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	7	7	7
Pipe, Carbon (Hous)	26	15	17

Electric & Electronic

Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	13	13	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	9	9	9
ICs (Linear) (Phil)	12	16	16
Motors (Phil)	21	21	21
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	7	7	13
Relays (Chgo)	15	15	15
Resistors (Chgo)	10	10	12
Resistors, Wirebound (Phil)	10	10	18
Transformers (Chgo)	10	10	10

Lumber

Hardwood (Pgh)	3	3	3
Hardwood (Clev)	3½	3½	3½
Plywood (Chgo)	2	2½	1½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	3	3	3
Softwood (Phil)	1/5	1/5	1/5
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½

Packaging

	Now	Month ago	Six months ago
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	11	11	11
Cartons, Corrugated (Clev)	3	3	3
Cartons, Corrugated (Hous)	3	3	4
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	7	7	7
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	5	5	6
Shrink Film (Clev)	3	3	3
Drums, Fiber (Pgh)	3½	3½	3½
Drums, Steel, Std. (Pgh)	2½	2½	2½
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	6½	6½	6½
Strapping (Clev)	2½	2½	2½
Strapping (Pgh)	3	3	3

Chemicals-Plastics

Adhesives (LA)	1½	1	2
Naphthalene (Chgo)	2	2	2
Paint (LA)	3½	3	3½
Paint, Coil Coating (Pgh)	3	3	3
Paint, Maint. (Clev)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Clev)	2	2	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	1	1	1
PVC Resin (Pgh)	4	4	4
Titanium Dioxide (LA)	1	1	1½

Paper

Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	8	8
Tissue (Pgh)	5½	5½	5½

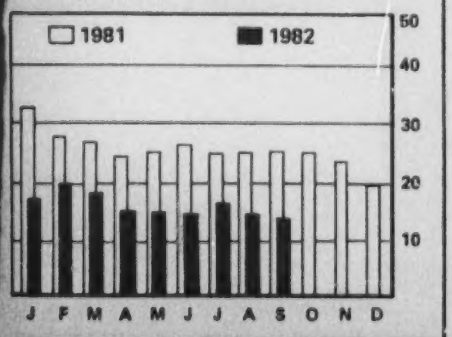
Non-Ferrous

	Now	Month ago	Six months ago
Aluminum Coil (Chgo)	7½	7½	6
Aluminum Plate (Chgo)	7	7	7
Aluminum Sheet (LA)	7	7	12
Aluminum Sheet (Chgo)	8	8	8
Brass Castings (LA)	7	7	4½
Brass Rods (Chgo)	2½	2½	2½
Brass Sheet (Chgo)	5	5	5
Brass Tube (Chgo)	9	9	9
Copper Fittings (LA)	3	3	6
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	3½	6	6
Copper Tube (Phil)	6	6	6
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	3	4	6
Wire, Specialty (LA)	6	6	6
Zinc (Pgh)	2	2	2

Miscellaneous

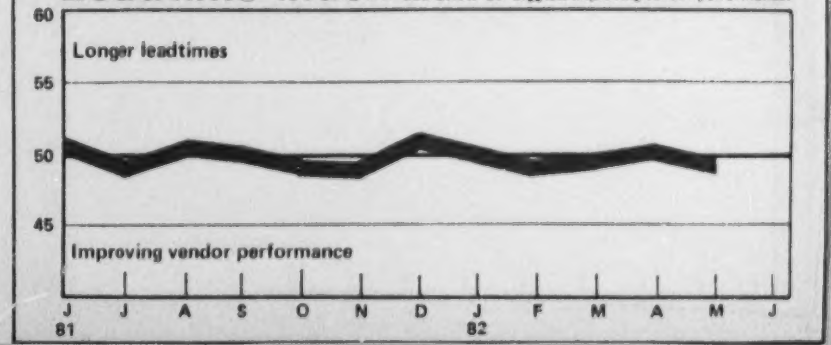
Bearings, Domestic (Phil)	22	22	22
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	52
Compressors, Centrifugal (Hous)	56	56	60
Compressors, Reciproc. (Hous)	45	45	45
Fasteners (Chgo)	½	½	½
Fasteners (LA)	10	10	4½
Fasteners, Std. (Phil)	3½	3½	3½
Heat Exchangers, Carbon-alloy Steel (Hous)	32	32	37
Heat Exchangers, Hi-pressure (Hous)	43	43	46
Insulation Mat'l. (LA)	4	4	5
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1	1	1
Pumps (Hous)	4l	4l	4l
Pumps (LA)	10	10	9
Rubber, Synthetic (LA)	1½	2	1
Rubber Hose (LA)	5	5	7
Tungsten Carbide Parts (Hous)	15	15	16
Valves, Cast Steel (Hous)	13	13	13
Welding Supplies (Hous)	5	5	5

Forward commitments

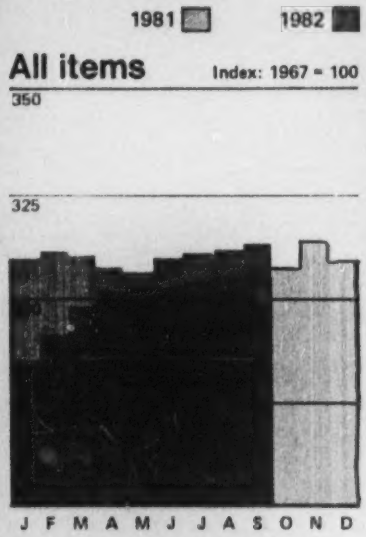


Leadtime index

A 'diffusion' index based on 158 key commodities. Above '50' indicates a tendency for leadtimes to stretch out. Below '50' suggests improving vendor performance.



Industrial prices at a glance



Source: Bureau of Labor Statistics

Only minor price changes

The fourth quarter is taking over where the third quarter left off, with only minor increases in Uncle Sam's comprehensive industrial producer price index—and a sprinkling of actual declines to help offset the few items that are still edging higher.

As in the past few months, the star performers (in terms of price deceleration) have been the basic raw materials: steel, nonferrous metals, chemicals, plastics and paper.

Also on the extremely weak side are such construction materials as lumber, cement, and structural steel. Ditto, scrap, which generally reflects price trends in primary markets.

Equally significant is the growing number of "no changes" in the more highly fabricated component-part and finished-goods categories. And even these may have an "upward bias," because many of these products often fail to pick up such unofficial forms of price shading as better credit terms and freight absorption.

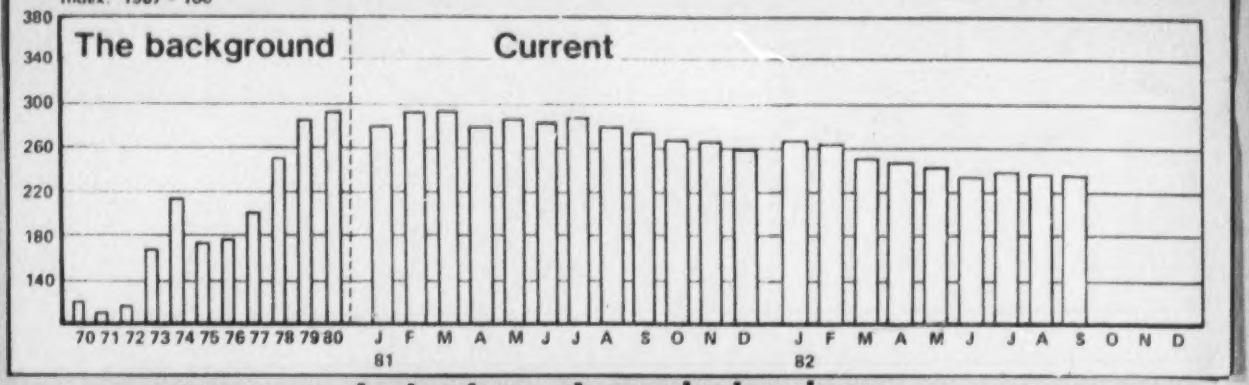
These discounts, incidentally, are not insignificant. One government price official, for example, feels that such "deals" have probably knocked as much as 1% off industrial price averages over the past six months. ***PW***

This month's breakdown

	Latest level (August)	Percent change from: Month ago	Year ago
Bearings	335.3	0.4	6.2
Bolts, nuts, etc.	272.7	0.1	2.9
Chemicals, inorganic	314.3	0.2	7.3
Chemicals, organic	366.0	-0.1	-11.0
Concrete products	298.3	0	1.7
Cutting tools, small	276.3	-0.7	3.6
Electrical instruments	258.5	0	10.2
Electric lamps (bulbs)	285.2	0	4.3
Fans and blowers	334.3	0.1	2.8
Fittings, industrial	310.2	0	2.4
Foundry and forge products	345.5	0	4.1
Fuel oil (residual)	1250.0	0.2	0.3
Furniture, commercial	278.0	0.1	7.3
Gasoline	694.9	1.3	-4.2
Glass, flat	226.1	0	3.6
Glass containers	357.3	0	6.5
Gypsum products	253.9	-0.7	0.5
Hand tools	341.9	0.9	6.2
Hand tools, power driven	221.7	0.1	3.8
Industrial furnaces	354.9	0.3	5.4
Integrating and measuring instruments	213.1	0	6.0
Internal combustion engines	331.5	1.4	8.5
Lubricating oil	888.1	0	-1.4
Lumber millwork	280.2	-0.6	2.9
Material handling equipment	285.8	-0.3	1.8
Metal containers	328.8	-0.3	3.2
Metal mill shapes (nonferrous)	297.1	0.3	-3.5
Metal tanks	311.4	-0.1	1.9
Motors and generators	313.9	0.3	3.9
Motor trucks	285.2	0	9.1
Office and store equipment	152.3	0.3	2.3
Paperboard	255.5	0.2	-2.0
Paper boxes and shipping containers	249.3	-0.4	0.2
Paper office supplies	226.5	0	3.8
Paint	265.1	0	5.7
Plastic resins	282.4	0.6	-5.1
Precision measuring tools	239.2	0.3	6.4
Pumps and compressors	347.5	0	5.1
Refractories	341.2	0.1	11.1
Rubber belts and belting	322.3	-1.3	10.5
Scales and balances	226.9	0	2.3
Steel products	347.0	-0.2	1.1
Switchgear	260.2	-0.2	3.3
Textiles, synthetic fibers	163.1	0.4	1.2
Textiles, gray fabrics	144.5	-0.2	-3.0
Tires and tubes	257.9	0.9	3.2
Transformers and power regulators	224.5	0.6	6.0
Valves, industrial	329.2	0	2.9
Welding equipment	273.0	0.2	3.3
Wire and cable	202.2	0.1	-1.9

PW raw material price barometer

Latest month 235.0
Month before 236.2
Year ago 277.2



Latest spot market prices

Ferrous metals

	Latest price	Previous month	Year ago
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	347.00	347.00	347.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	21.65
Steel, structural shapes, Chi., cwt.	23.90	23.90	21.65
Steel, structural shapes, Los Angeles, cwt.	24.40	24.40	22.15
Steel, bars, dlvd. Phila., cwt., merchant quality	14.35	14.35	14.35
Steel, bars, Pitts, cwt.	14.35	14.35	14.35
Steel, bars, C.R., Pitts, cwt.	31.00	31.00	29.20
Steel, plates, Chi., cwt.	24.25	24.25	23.25
Steel, plates, Pitts., cwt.	24.25	24.25	23.25
Steel, plates, H.R., Pitts., cwt.	20.80	20.80	20.80
Steel, sheets, C.R., Detroit, cwt.	24.65	24.65	24.65
Steel, strip, C.R., Chi., cwt.	29.05	29.05	29.05
Steel, basic wire, Pitts., cwt.	23.65	23.65	25.95

Nonferrous metals

Aluminum, ingot, lb. (market piece)	0.76	0.76	0.76
Alum. sheet, H-H 3003, .04 in., 48x144, mill fin., lb.	1.02	1.02	1.02
Antimony, in alloy, lb.	2.00	2.00	2.00
Beryllium-copper, cast ingot, lb.	4.95	4.60	4.11
Brass, red, 85%, [sheet], lb.	1.15	1.17	1.23
Brass, yellow, [sheet], lb.	1.09	1.11	1.17
Cadmium, ton lots, lb.	1.00	1.00	1.60
Copper, electrolytic, wire bars, refd., lb.	0.68	0.72	0.81
Copper sheet, over 24 in., lb.	1.24	1.26	1.32
Lead, common, N.Y., lb.	0.25	0.26	0.38
Magnesium, pig ingot, [99.8%], lb.	1.34	1.34	1.34
Mercury, 20 fl. lots, N.Y., fl.	370.00	340.00	422.00
Molybdenum Climax Oxide/bags, lb.	8.50	8.50	8.50
Nickel, electrolytic, producer, lb.	3.20	3.20	3.50
Platinum, producer, oz.	475.00	475.00	475.00
Silver, N.Y., oz.	8.21	9.11	9.29
Tin, Straights, N.Y., lb.	6.23	6.59	7.82
Zinc, Prime West, East St. Louis, lb.	0.420	0.420	0.463
Zinc, die casting alloy, No. 3, lb.	0.455	0.455	0.526

Chemicals

Acrylonitrile, tanks, lb.	0.460	0.460	0.440
Ammonia, anhydrous, fertilizer, wholesale, tanks, ton	210.00	210.00	210.00
Benzene, petroleum, tanks, Houston, gal.	1.47	1.47	1.54
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	17.50
Creeylic acid [over 25%], tonks, lb.	0.66	0.66	0.66
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	0.101	0.101	0.101
Glycerine, synthetic, tanks, lb.	0.805	0.805	0.805
Linseed oil, raw, bulk, carlots, lb., f.o.b. N.Y.	0.295	0.295	0.345
Methanol, syn., tanks, 4,000 gals., f.o.b. Gulf Coast plants	0.715	0.715	0.795
Naphthalene, crude, tanks, lb.	0.220	0.220	0.220
Phthalic anhydride, tanks, lb.	0.33	0.33	0.42
Polyethylene resin, low density liner film grade (market price), lb.	0.25	0.25	0.31
Polypropylene, homopolymer grade (market price), lb.	0.37	0.37	0.37
Polystyrene, general purpose grade (market price) lb.	0.36	0.36	0.41
Resin, W.G. grade, carlots, f.o.b., N.Y., cwt.	46.50	46.50	46.50
Shellac, bone dry, N.Y., lb.	1.65	1.65	1.65
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	0.350	0.335	0.375
Sulphur, crude, ex-terminal, Tampa, Fla. long-ton	135.00	147.50	147.50
Sulphuric acid, 66%, commercial, tanks, ton	93.69	93.69	93.69
Titanium dioxide, anatase, reg., carlots lb.	0.69	0.69	0.69
Xylene tanks, gal.	1.45	1.45	1.46

Paper

	Latest price	Previous month	Year ago
Bond paper, No. 1 sulfite, water marked, 20-lb., 4 cartons, cwt.	68.60	68.60	68.60
Gummed sealing tape, carton	15.70	15.70	15.45
Offset paper, No. 1 Grade	49.70	49.70	45.50
Folding boxboard, white clay coated 80 bright, ton	396.20	403.62	411.67
Wrapping paper, std. distribution cost, kraft, basis wt. 50 lb., roll	28.00	28.00	21.00
Kraft linerboard, 42 lb., unbleached, ton	270.00	270.00	300.00

Building materials

Lumber, 2x4 fir, mbf, cl	296.10	292.70	325.61
Lumber 2x2, pine, mbf, cl	271.97	273.40	296.23
Plywood, plyform, 3/4", msf, cl	557.50	577.50	590.80
Plywood, 5/8", msf, cl	343.39	343.39	349.64
Cement, bulk, ton, tl	62.07	62.07	61.19
Sand, ton, cl	5.88	5.85	6.08
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.88	45.88	45.01
Crushed stone, 1½", ton, cl	7.75	7.75	7.50
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.75	0.75	0.68
Gypsum sheathing, ½"x1"x8", msf, tl	156.32	156.38	147.04
Brick, common, per thousand, tl	177.15	177.05	163.76
Asphalt paving, AC-20	156.27	154.52	169.23
Concrete sewer pipe, 12", prem. joint, per foot, cl	6.55	6.55	6.63

Textiles

Burlap, 10 oz., 40", N.Y., yd.	0.257	0.248	0.254
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	0.97	0.98	1.01
Cotton middling, 1", N.Y., lb.	0.579	0.590	0.603
Printcloth, 48", 80x80, N.Y., spot. yd.	0.56	0.55	0.84
Army duck, 37", 13 oz., yd.	1.70	1.70	1.70
Blended printcloth, 64", 78x54, yd.	0.64	0.57	0.77
20s combed yarns	1.72	1.72	1.85
Wool tops, N.Y., lb.	3.60	3.60	3.60

Hides and rubber

Hides, cow, light native, packers, Chi., lb.	0.425	0.450	0.480
Rubber, No. 1 std., ribbed smoked sheets, N.Y., lb.	0.433	0.460	0.465

Fuels

Fuel oil, No. 6 or Bunker C, Gulf., bbl.	24.75	24.50	23.25
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	32.25	31.25	32.77
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	0.950	0.970	1.045
Gasoline, 94 oct., reg., Chi., tank car, gal.	0.949	0.970	1.003
Heating oil, No. 2, Chi., bulk, gal.	0.951	0.905	0.960
Heating oil, No. 2, N.Y., bulk, gal.	0.977	0.940	1.013
Heavy fuel, PS 400, Los Angeles, rack, bbl.	25.35	25.60	24.25
Jet kerosene, gal.	0.990	0.930	N.A.
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	0.46	0.36	0.44

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]